

REMARKS

Claims 1-59 are pending in the application, of which Claims 1, 23, 38, 41, 42, 43, 44, 56 and 59 are independent. All claims were rejected under 35 U.S.C. § 103(a) based on U.S. Patent No. 5,953,707 to Huang in view of U.S. Patent No. 6,317,725 to Muraoka and U.S. Patent No. 6,195,643 to Maxwell. This rejection is respectfully traversed. Claims 1, 13, 23, 31, 38, 40, 41, 42, 43, 44, 45, 56 and 59 are amended, Claim 12 is canceled and new Claim 60 is added to the application by the present amendment. These amendments are not in acquiescence to the rejections. With entry of the present amendment, it is believed that all claims are in condition for allowance.

As described in the application, a typical manufacturing supply chain includes OEMs, which design and sell equipment or products. In order to keep costs down, an OEM will often use other vendors to manufacture some of the components of its products. Typically, the components are not sold directly to the OEMs but rather to distributors. This works well as long as there are not any problems in the supply chain, such as shortages or surpluses. Consider a situation where an OEM circuit board manufacturer loses several critical months in releasing a new circuit board product on the market because of a shortage in the supply chain of a critical component of that OEM's product. This loss of product manufacturing time and missed market window could cost the OEM company dearly. Unfortunately, prior to this invention there was no effective mechanism available that enabled participants in the supply chain to be notified quickly about potential problems in the supply chain.

The present invention monitors independent supply chain sites to detect conditions that can create problem situations in the supply chain. Those sites may be of companies that are unrelated but for the supplier/consumer relationship. Supply chain related data is extracted from the independent supply chain sites using, for example, a data transfer engine (DTE). The DTE extracts the supply chain related data from the sites and forwards or uploads it to a data collection site, which is preferably a distributor or an OEM. The extracted supply chain related data is translated into a common format at the data collection site. The supply-chain related data on the site is continually monitored for any changes that may present the problem conditions. When looming conditions of surplus or shortage become apparent, a problem condition can be detected,

and an alert is raised in the system. The alert, for instance, can be sent to a supply chain site that may be affected by the problem condition.

By way of comparison, Haung facilitates the integration of a vendor's internal manufacturing and inventory databases. In particular, Haung teaches to create a server based Decision Support System (DSS) that communicates with a variety of databases that relate to a vendor's supply chain, such as, sales, inventory, customer, repair, and marketing databases. Haung uses object linking or object embedding techniques to integrate the databases. Haung aims to provide a user interface for a client system that projects a view (a Decision Support Frame) into the company's supply chain that takes into account the view point of the particular user, such as the view point of a plant manager or sales manager. The DSS's custom interface enables the various decision makers in the company's supply chain to have a custom interface that is representative of their respective department in the company.

Although Haung's DSS relates to a so-called supply chain, it is directed to a different level of supply chain management than the present invention. In particular, Haung's DSS addresses issues in a company's internal supply chain, where the company or entity's personnel from different departments, such as marketing, sales, etc. need to make informed decisions using information obtained from the company's different departments. Haung DSS interfaces with the databases from these different departments, and using these resources, users of the DSS can obtain an informed supply chain analysis.

The present invention, however, monitors the supply chain for changes that may affect various independent participants in the chain. The present invention enables OEMs, for example, to be alerted to changes and potential problems in the supply chain occurring at a supply chain site. Proprietary supply chain information can be collected from independent sites and analyzed for changes. The changes can trigger an alert. The alerts, for example, enable the participants of the supply chain that are affected by these changes to be notified of the changes so they can respond accordingly. Haung does not relate to the claimed monitoring of independent sites of the supply chain, nor does Haung detect problems, such as shortages or surpluses, and assert alerts in response to the problems, as required by the invention. Rather, Haung relates to a system that

aids users in making informed decisions using internally available information about a supply chain.

Maxwell provides a decision making system that assists a “decision maker” in answering questions based on one or more questions previously answered by the user. The user is initially asked some questions by the system, and the user’s answers to these questions define the user’s “requirements.” Using a statistical analysis, Maxwell’s decision making system will process a user’s inputted question by “framing the question” based on the user’s requirements, and it will craft a response accordingly. Thus, it appears Maxwell relates to an expert system, and it is described as being particularly useful in accounting systems. As such, Maxwell is non-analogous art because it does not relate to monitoring a supply chain. Furthermore, Maxwell does not suggest the limitations of the claimed invention where alert conditions are determined based on a surplus or shortage in the supply chain of independent sites.

Muraoka relates to a production management process that enables users to create a production schedule. This process includes partitioning loads on production management in view of predetermined management spans for planning, executing, correcting and managing production schedules. As such, Muraoka does not relate to the monitoring of a supply chain.

It is submitted that the cited references, taken separately or in combination, do not discuss the limitations of the claimed invention, namely, extracting and monitoring supply chain data from independent supply chain sites, detecting a problem condition if there is a surplus or shortage in the supply chain, and responding to the problem condition by asserting an alert, as required by independent Claim 1 and similarly required by independent Claims 23, 38, 41, 42, 43, 44, 56 and 59. Accordingly, the Applicant respectfully requests reconsideration and withdrawal of the rejections under § 103.

Addressing the rejection of dependent Claim 4, in particular, this claim requires scanning at each supply chain site at regular intervals, and uploading upon finding new or changed data. As none of the references relate to scanning supply chain sites for new or changed data, it is believed that the rejection to this claim should be withdrawn.

Addressing the rejection of Claims 23 and 31, these claims require encrypting the proprietary supply chain data from the independent supply chain sites before uploading the data to the data collection site. Because security may be a issue when uploading potentially sensitive proprietary data from independent supply chain sites, the invention can address this issue by encrypting the data before uploading it. In the references, however, security is not necessarily addressed. Haung, for example, integrates resources, such as databases, in its local, substantially heterogeneous network where security does not appear to be an issue. As a result, there is no real need to encrypt the data in Haung's local network DDS; whereas, in the invention, proprietary data may be uploaded from independent supply chain sites and a supply chain site can preserve the confidentiality of its proprietary data before it is uploaded by having the DTE encrypt the data before transferring it. Thus, it is believed that the references do not discuss the limitations of Claims 23 and 31 and therefore the rejections of these claims should be withdrawn.

Addressing the rejection of dependent Claim 32, this claim requires that the alert turn red to indicate the existence of an alert condition. None of the references discuss the concept of having an alert, nor do they suggest anything about an alert that is displayed as red. The invention, for example, might display the alert as red to indicate that the invention has detected a critical problem in the supply chain. Thus, as the cited references do not relate to an alert that is displayed red, then it is respectfully requested that the rejection to Claim 32 be withdrawn.

Regarding Claim Amendments

Claims 1, 13, 23, 31, 38, 40, 41, 42, 43, 44, 45, 56 and 59 are amended to claim the invention more distinctly. In particular, Claim 1 is amended to include the alert limitations originally recited in dependent Claim 12, now canceled, and independent Claims 59 and 56. Further, Claim 1 is also amended to specify examples that may trigger the alert, such as a shortage in the supply chain, as originally described in dependent Claim 33, or surplus in the supply chain, as originally described in dependent Claim 34. In addition, Claims 23, 31, 38, 41, 42, 43, 44, 45, 56 and 59 are amended to recite limitations similar to those in amended Claim 1. Thus, no new matter is introduced. Acceptance is respectfully requested.

New Claim 60 is added to the application. Claim 60 includes certain limitations from Claims 4, 33, 34 and 59. Thus, no new matter is introduced. Claim 60 recites that the supply

chain data at supply chain sites is monitored for any changes to the supply chain data. If a change in the supply chain data is detected, an alert is asserted. As none of the references relate to monitoring independent supply chain sites to detect changes in their proprietary information, and responding to a detected change by asserting an alert, it is believed that this claim is in condition for allowance. Acceptance and allowance are respectfully requested.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

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Dated: 11/21/3